

Notice of Potential NPDES Permit Violations

Sanitary Sewers Overflow (SSO) Inspection

AT

The City of Bolivar, Missouri

345 S. Main Ave

Bolivar, MO 65613

September 24-28, 2012

Based on the requirement of the revised October 1, 1980 STANDARD CONDITIONS FOR NPDES PERMITS NO. **MO0022373**; PART I -SECTION A - MONITORING AND REPORTING, Item 3. **Facilities Operation:** Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.

1. The City of Bolivar failed to establish systematic procedures (written) to receive, document and track sewer complaints and communicate such complaints with the appropriate staff members at the Wastewater/Sewer Department to adequately response and correct a sewer issue(s) especially if they caused and resulted in basement backups and a Sanitary Sewer Overflow (SSO).
2. The City has no written procedures to administer the collection system.
3. The City of Bolivar failed to provide me with complete physical characteristics of its collections system, especially the age of both sanitary force main and gravity sewer lines.
4. The City of Bolivar failed to perform preventative maintenance of its collection system.
5. The City of Bolivar failed to document and presents the adequate number of footage of sanitary sewer lines cleaned in the past five years.
6. It appeared that the City of Bolivar is not dedicating the appropriate funding and number of trained staff to administer the 9 lift stations and maintain the 77 miles of its collection system. The City dedicates 2.25 full time employee (FTE) to inspect and administer the 77 miles of sanitary sewer lines, 2.25 FTEs to inspect and maintain all lift stations and 3 FTEs to the wastewater treatment plant.
7. The City of Bolivar has identified several problematic areas within its collection system, and has identified Infiltration/Inflow as sources of the problem; however, the City failed to act and take the necessary measures to address the problems.
8. The City administers and maintains 9 Lift Stations. Most of the Lift Stations appeared to be structurally deteriorating and not cleaned from previous high flow

events. The City failed to maintain and retain a sound physical structure of the Lift Stations.

9. The City failed to provide alternative backup power to some of the Lift Stations.
10. The City need to evaluate the hydraulic capacity of the collection system, especially at the lift stations and manholes that are connected in series which results in flow-bottlenecking and routinely cause sanitary sewer overflow during high flow.
11. The City should ensure that commercial and industrial user's discharges do not cause damages to its collection system, especially at the Health centers.
12. Based on the requirement of the revised October 1, 1980 STANDARD CONDITIONS FOR NPDES PERMITS NO. MO0094854; PART I -SECTION A - MONITORING AND REPORTING, Item 2. **Noncompliance Notification**
a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions: (i) a description of the discharge and cause of noncompliance, and (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge. b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by case basis if the oral report has been received within 24 hours. Based on Item 1(above) observation, it appears that the City failed to report all actual SSO occurrences especially during high flow events.

Notice Receivedby:
(name and Title)

W. H. Dwyer City Administrator

Date:

9-28-12



September 27, 2012

To Whom It May Concern:

The following is the City of Bolivar's Policy on handling incoming calls to due Water/Sewer related issues:

All Water/Sewer related calls will be processed through City Hall's reception department. The receptionist/assistant will get required information to assist the caller then input information into the computer system.

From this point the information will then be received by the Water/Sewer Supervisor. He/she will then investigate the problem, contact City Hall receptionist/assistant and inform them of the complete assessment of the situation and/or work done along with the property owners if applicable, then properly document issue at hand, and file.

After hours calls will be processed through 911 Central Dispatch. Calls will be delegated to the proper department then documented as stated above.

If you have any questions regarding this procedure, please contact Public Works Director Jerry Hamby at 417-326-2489.

BYPASS, SSO, and BASEMENT BACKUP REPORTING
Revised 2/18/11

STEP ONE:

Within 24 hours of the incident contact the Southwest Regional Office of the Missouri Department of Natural Resources. You must contact them by telephone and you must speak to someone in that office in person. You cannot leave a message. MDNR SWRO phone number is 417-891-4300.

STEP TWO:

Fill out a Self Reporting Form for Wastewater Bypasses and SSO's (one form for each incident, i.e.; each manhole discharging ect.) Be sure to use the exact manhole identification number, for example; G4-MH-185. Turn this form into the office of the Public Works Director. If for some reason the Director is out of the office for an extended period of time you may need to mail the form to:

MDNR Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912

The completed form is to be mailed to the SWRO within 5 days of the incident. For bypasses the form is to be mailed in as soon as the bypass ends. Make 2 copies of the report. The copies must be kept on file in the office of the Public Works Director.

STEP THREE:

The results from any samples taken during a discharge must be mailed as soon as completed to:

MDNR Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912

Make 2 copies of the sample results. The copies must be kept on file in the office of the Public Works Director.

**Missouri Department of
Natural Resources****Clean Water Information System**

Event Search

- Account Settings
- More Information
- Logout

Overflow / Bypass Event Details Initial Report

Facility Name: Bolivar WWTF

Permit No: MO0022373

Record successfully updated.

* Indicates a Required Field

**Indicates a Required Field for Final Report

Once you enter the Event End Date & Time fields and Add Event/Save Changes, you will no longer be able to edit this record!

Event Details

Bypass = at the wastewater treatment plant; Overflow = in the collection system

*Type of Event: SSO

*Wet or Dry Event? Wet

*Event Begin Date: 04/14/2012 (MM/DD/YYYY)

*Event Begin Time: 10:00 (HH:MM) Military Time

**Event End Date: 04/14/2012 (MM/DD/YYYY)

**Event End Time: 14:00 (HH:MM) Military Time

Event Duration (hh:mm) 0d:4h:0m

*Initial Report Date: 04/14/2012 (MM/DD/YYYY)

*Reported By: Joe Cornell

*Immediate Contact (417) 328 - 0271

Ongoing? ☒

*Estimated Volume at time of Initial Report (gallons): 1000.00

Is bypass reaching Waters of the State? ☒

Discharged To: Waterway

**Cause of Event: Rain

Cause of Event Comments: Flash Hydraulically overloaded

Event Type: Manhole

* To select more than one choice hold down the control key on the keyboard

Additional Impact:

- Fish Kill
- Public Beach or Public Use Area Impacted
- Dry Weather Release
- Drinking Water Intakes Affected
- Release Volume Greater Than 50,000 Gal

Wet Event Details

*Wet Event Start Date: 04/13/2012 (MM/DD/YYYY)

**Wet Event End Date: 04/15/2012 (MM/DD/YYYY)

*Precipitation Type: Rain

**Precipitation Amount (inches): 4.10

*Soil Conditions: Saturated

Location Information

County: Polk

*Location Description: 101-101

Longitude:

Latitude:

UTM Easting: _____

UTM Northing: _____

5 - Day Report

**Estimated Final Total Volume (gallons): 66000.00

Did bypass reach Waters of the State? ☒

Effected Waterbody: Townbranch

**Response: sixty-six thousand gallons a

[Add Additional Event](#)



Missouri
Department of
Natural Resources

1-800-361-4827 / 573-751-1300
E-mail: cleanwater@dnr.mo.gov

CITY OF BOLIVAR

P.O. BOX 9

BOLIVAR, MISSOURI 65613

FAX (417) 777-3212

CITY HALL

345 S. Main Avenue
(417) 326-2489

POLICE DEPARTMENT

345 S. Main Avenue
(417) 326-5298

GREENWOOD CEMETERY

411 S. Dunnegan Avenue
(417) 326-4232

CHARLES L. EALY, MAYOR

345 S. Main Avenue
Office (417) 326-5242 or (417) 326-2489

DATA MANAGEMENT SYSTEM

Using our Tracking System that is on an Excel spreadsheet (SSO/Bypass Event Tracker) all data related to SSO's, basement backups and bypasses are recorded on the Tracking System spreadsheet. We can then use the spreadsheet to correlate locations, dates, frequency of events and types of events, they can then be reviewed and analyzed on a daily, weekly, or monthly time frame by the Public Works Director. All current and past recorded events will be entered into the Tracking System to help give a broader overview of where troubles continue to occur or may exist. All city hall computers are backed up nightly and the backups are kept at an off site location.

Service orders are generated through our utility billing software (INCODE) when a consumer calls in a problem. The utility department generates a service order/trouble card then dispatches it to the sewer department. The information that is included in the trouble card is as follows: time, date, reporting person's name, address, phone number, trouble reported, who received the call, who received the trouble card and action taken. After the problem has been diagnosed and corrected the action taken portion of the card is filled in and returned to the utility billing department so they can complete the service order and then the information from the trouble card is recorded into the Tracking System. When diagnosing the problem, if we find a manhole discharging or a basement backup, all SSO reporting procedures are followed. When an SSO is not reported by a consumer but is discovered by an employee all SSO reporting procedures are followed and an SSO report form is used instead of a trouble card and is then recorded into the Tracking System.

All manholes have been given a numeric designation and all sewer mains have been given an alpha character designation on the sewer main map, which at this time is in hard copy only. Our plans are to have a GIS mapping system up and running by midyear 2008. The GIS mapping system has been budgeted for and bids for the system have been received and are under review. The vendor should be selected before the end of December 2007. The system will have layers that will include: sewer mains (using the alpha character designation), sizes and types, and manholes with invert elevation (using the numeric designation) and types. This system will greatly enhance our ability to track SSO and basement backup locations; frequency of events, repairs, upgrades, replacement,

cleaning schedules, manhole inspections, mains that have been videoed and flow monitoring data that has been collected. All the previously mentioned items can be documented on the mapping system. Notes with dates, times and various other information can also be included that will enable us to detect reoccurring events as well as locating random events through out the sewer system. The GIS mapping system will be housed in a computer server of its own and a city staff member will be trained to keep all information current and updated.

Our sewer cleaning and video crew keeps a daily log of all mains that are cleaned and inspected. While cleaning and inspecting, the crew is evaluating and grading the condition of the mains and manholes. This information is recorded on an Excel spreadsheet and will also be incorporated into the GIS mapping system. These video inspections and reports are reviewed and analyzed by the Public Works Director. This information will be used when determining which sewer basins require the most urgent attention when we get to the Plan of Action stage.

We have selected R.E. Pedrotti Co., Inc. to install a Scada system during the calendar year 2008. This system will monitor our lift stations; pump run time and float level in the wet wells as well as controlling our water wells. The computer data from the system will be used for flow monitoring during dry and wet weather. This system will also give us an early warning/alert if for some reason the pumps do not come on automatically. The warning/alert should help prevent any future overflows from the lift stations. The same warning/alert system will be installed on the clarifiers at the wastewater treatment plant. The warning/alert system uses a radio transmitter linked to a telephone dialer for immediate warning notification to designated employees telephones. We also plan to set up monitoring devices at a number of lift station locations that will be linked to the scada system to record rainfall amounts. This system will be housed in city hall on its own computer server which will deliver to us, in real time; pump run time (flow monitoring data) and rainfall amounts. Any number of reports can be generated from the scada system program that can in turn be used in the GIS system and Tracking system.

As these new tools come on line the Data Management System will be re-evaluated and re-engineered to incorporate these enhancements.

77.07
Total

COLLECTION SYSTEM INFORMATION (MILES OR FEET)

		Gravity Sewer	Force Mains (miles)	Pump Stations
Total	Length	74.84	2.22	
	Number			
Age	0-25 years	26.93	.23	
	26-50 years	17.01	1.58	
	51-75 years	20.08	.41	
	> 75 years	10.82		
Diameter	<8 inches	.08	2.22	
	8-18 inches	74.77		
	19-36 inches			
	>36 inches			
Materials	Vitrified Clay Pipe (VCP)	36.37	.40	
	Reinforced Concrete Pipe (RCP)			
	Un-reinforced Concrete Pipe (CP)			
	Plastic	38.47	1.81	
	Brick			
	Pre-stressed Concrete Cylinder Pipe (PCCP)			
	Asbestos Cement Pipe (ACP)			
	Poly vinyl Chloride (PVC)			
	Steel			
	Ductile Iron			
	Cast Iron		.01	
	Techite (RPMP)			
	High Density Polyethylene (HDPE)			
	Fiberglass Reinforced Plastic (FRP)			

COMMENTS:



**CITY OF
BOLIVAR**

345 S. MAIN AVENUE • BOLIVAR, MISSOURI 65613 • FAX (417) 777-3212

4. This information has already been submitted to EPA.



**CITY OF
BOLIVAR**

345 S. MAIN AVENUE • BOLIVAR, MISSOURI 65613 • FAX (417) 777-3212

5. This information has already been submitted to EPA.

Item #6

The City of Bolivar was forced by budgetary shortfalls to downsize the Sewer department in April of 2012. There are two (2) additional personnel budgeted to be added in 2013, and if additional staffing is needed and adequate funding is available, additional personnel will be added in future budget years.



**CITY OF
BOLIVAR**

345 S. MAIN AVENUE • BOLIVAR, MISSOURI 65613 • FAX (417) 777-3212

7. The City of bolivar has received flow maps at the end of July 2012. Since then we have smoke tested and we have scheduled to replace several sections of main and several manholes where the flow was 14 times more than normal. We are continuing to work on the other non-typical flow areas. We will work on the worst areas first, then work our way to the less severe ones. We will then flow test again.



**CITY OF
BOLIVAR**

345 S. MAIN AVENUE • BOLIVAR, MISSOURI 65613 • FAX (417) 777-3212

8. The City of bolivar has cleaned all grease from all the lift stations. We have addressed the rust issues in the lift stations. We do not find it necessary to address the rust issues in lift station #3 because we plan to eliminate this lift station in the near future. We have sand blasted, and repainted. The City will inspect the wet wells and clean grease every 6 months as needed (April and September).

10-2-12 sand blasted pump guide rail brackets



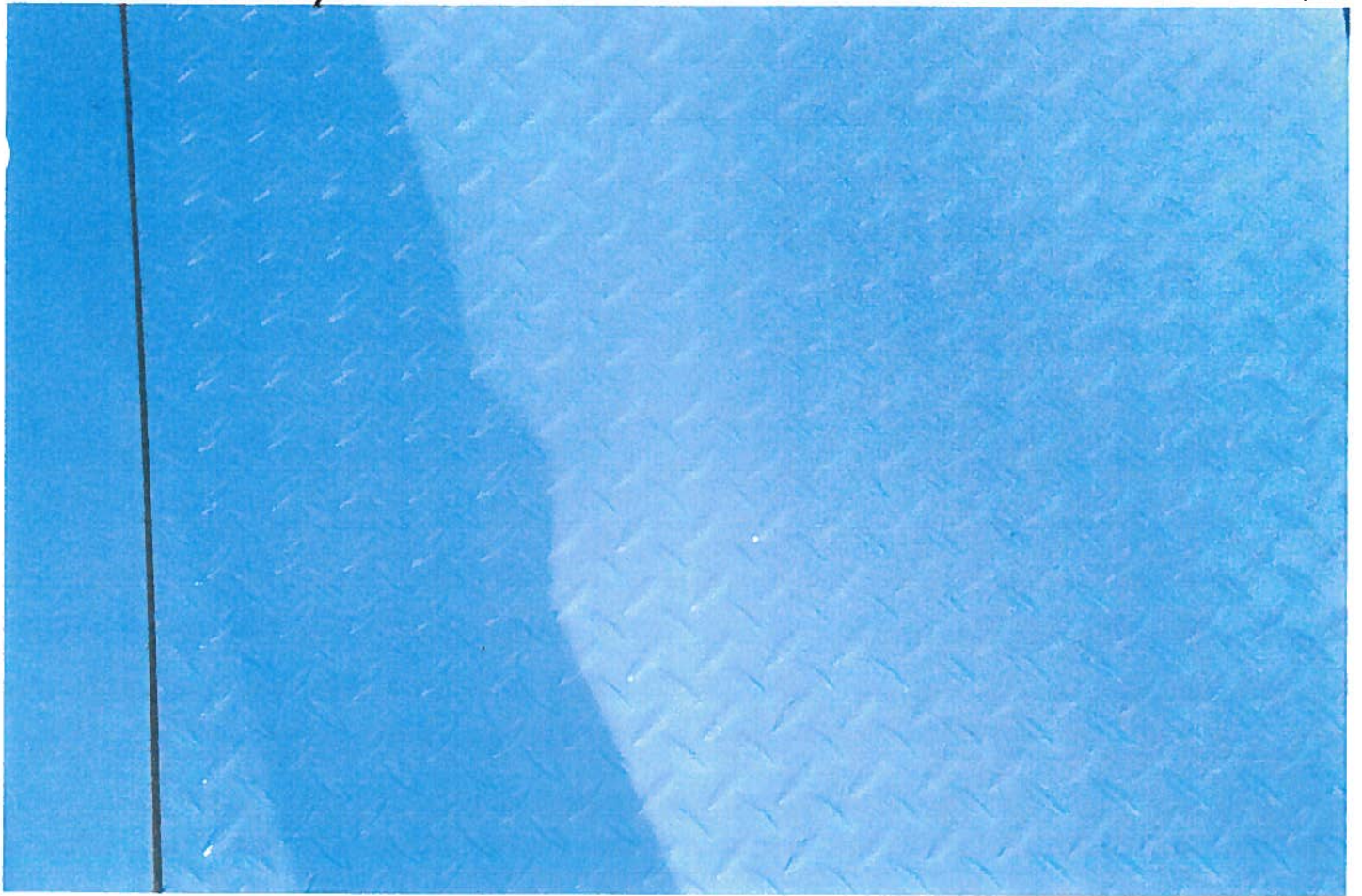
sand blasted Dry well Entrance cover



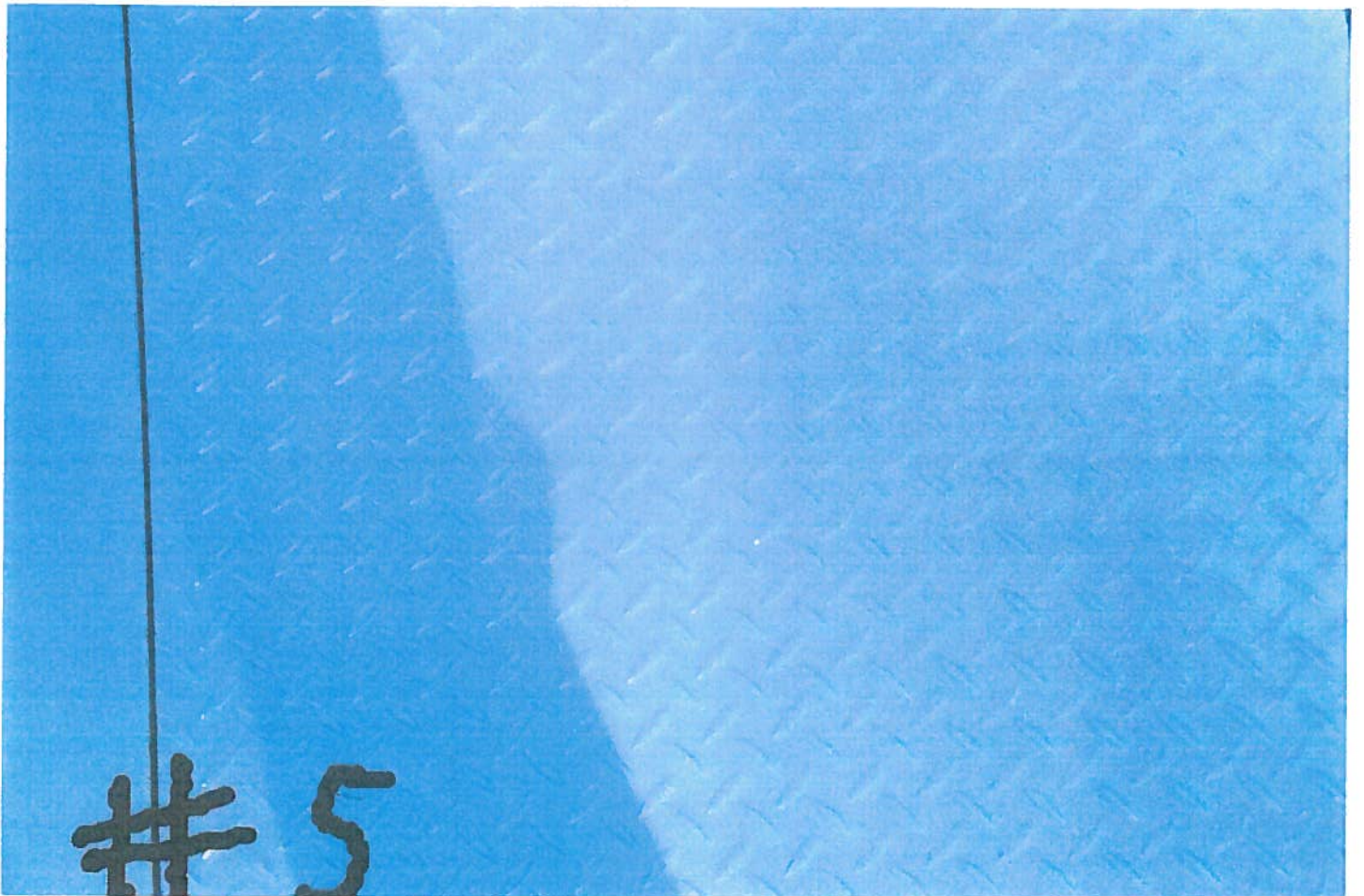


Lift Station # 5 painted pump guide rail
brackets with Black "POR 15" Rust preventive paint

Painted Dry well entrance Cover with Rust preventive pain



10-2-12



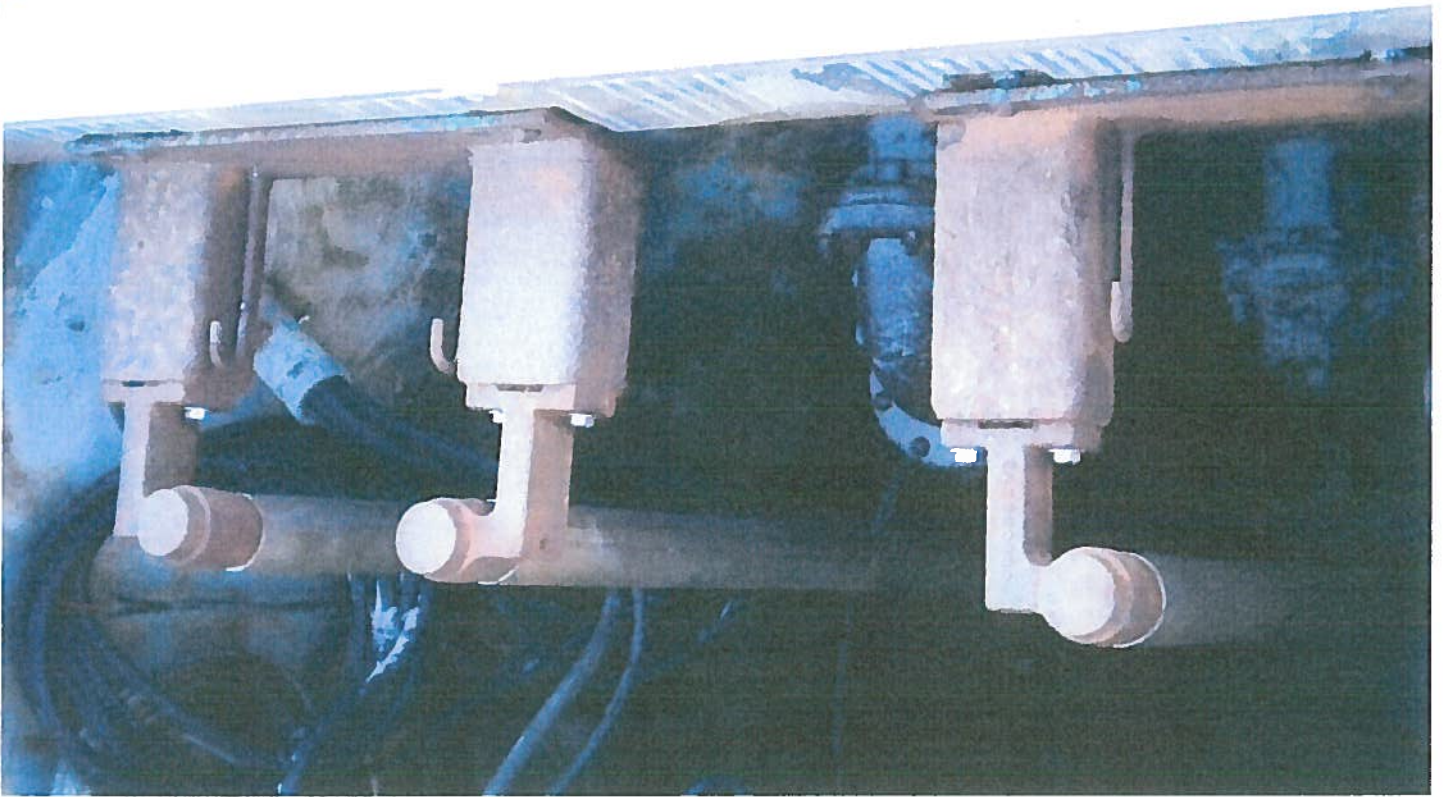
10-02-12

U.S. F. C. DE'Y & MFG. CORP.
MEDLEY, A. 305-885

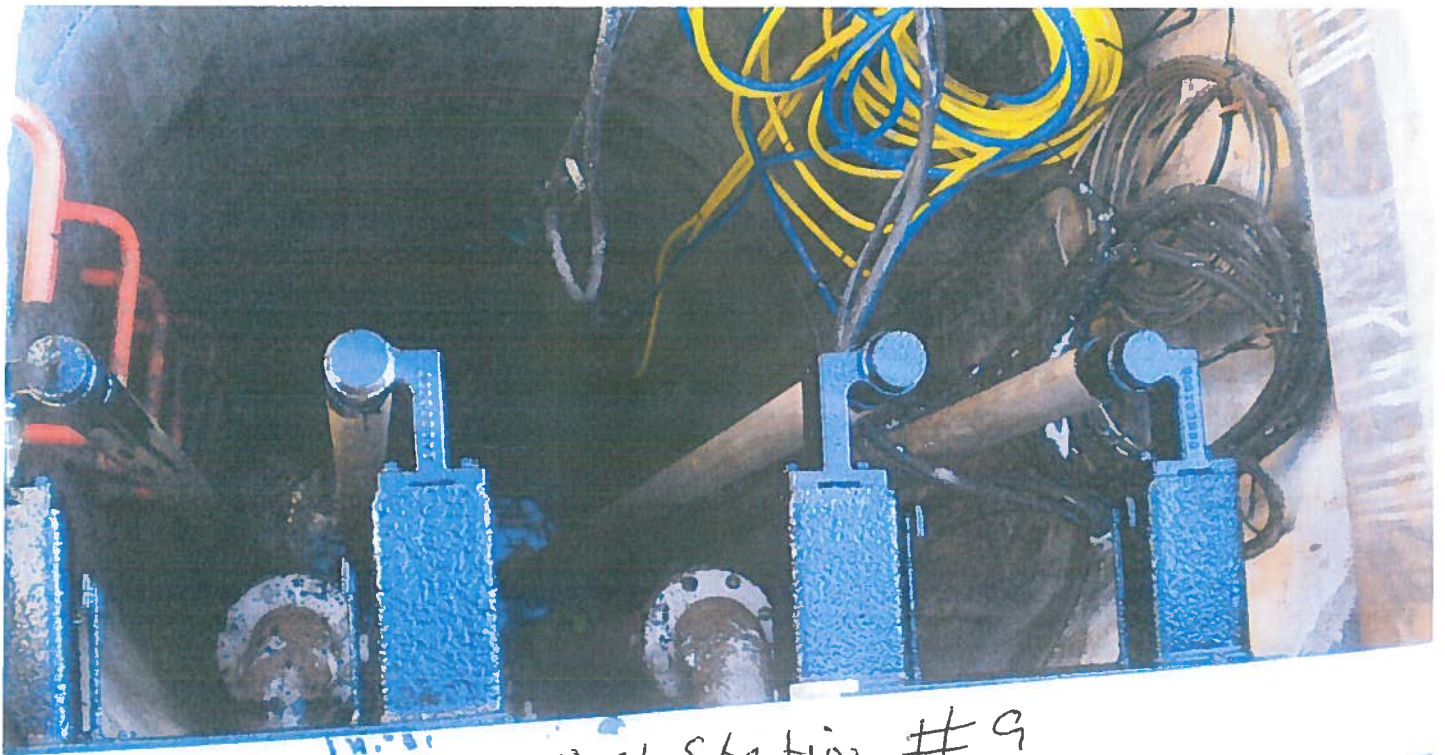
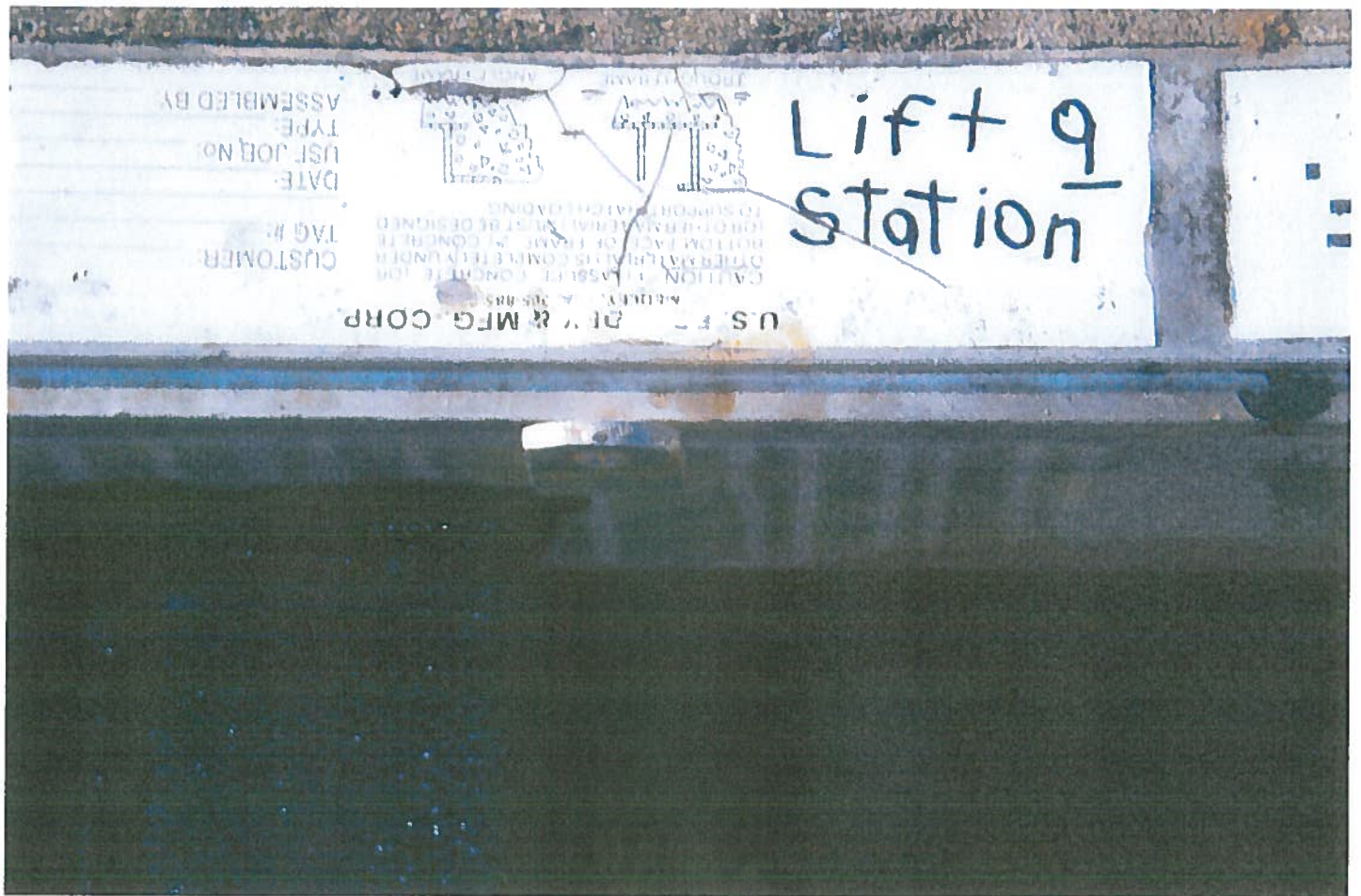
CAUTION: 1) ASSURE CONCRETE (OR
OTHER MATERIAL) IS COMPLETELY UNDER
BOTTOM FACE OF FRAME 2) CONCRETE
(OR OTHER MATERIAL) MUST BE DESIGNED
TO SUPPORT HATCH LOADING



Lift
Station
b + 9



10-2-12 Lift Station # 9
pump guiderail brackets were power washed with
Steam cleaner and sand blasted, before coating
with rust preventive paint



10-2-12 Lift Station #9

Sand blasted and painted
pump guid rail brackets



2-12 Wet Well access cover # 10 Lift Station
Picture before painting with Rust proof paint
We sand blasted before painting



**CITY OF
BOLIVAR**

345 S. MAIN AVENUE • BOLIVAR, MISSOURI 65613 • FAX (417) 777-3212

9. In the City 2013 budget we plan to install lift stations with automatic transfer and generator backup, except for lift station #3 and #10. We are going to use a portable generator for lift stations #3 and #10.



345 S. MAIN AVENUE • BOLIVAR, MISSOURI 65613 • FAX (417) 777-3212

10. The City has planned in the 2012 budget to allocate some money to eliminate lift station #3. We have also allocated funds to address the bottlenecking issue on South Lillian.

SECTION 700.065: CONSTRUCTION OF CHAPTER

It is the intention of Sections 700.010 through 700.050 to supplement and expand the provisions of the City of Bolivar zoning regulations relating to municipal water and sewer services. The provisions of those regulations and the provisions of this Chapter shall be construed so as to be consistent, insofar as possible. In the event of an irreconcilable conflict, the most stringent provisions shall govern so as to best protect the health and welfare of the residents of the City. (R.O. 2007 §700.065)

SECTION 700.070: CLASSIFICATION OF VIOLATIONS OF CHAPTER 700 -- PENALTIES FOR VIOLATION

A. Except as otherwise provided, any person found guilty of a violation of any of the provisions of this Chapter shall be deemed guilty of an ordinance violation and be punished as provided by Section 100.220 of this Code. Any person found guilty of a violation of Section 700.055 shall be deemed guilty of an infraction if no culpable mental state is alleged or, if alleged, is not proven. Any person found guilty of knowingly violating the provisions of Section 700.055 shall be deemed guilty of an ordinance violation and shall be punished as provided by Section 100.220 of this Code.

B. Any violation of this Chapter which is continuing in nature shall be deemed a separate offense for each day that such violation continues. (R.O. 2007 §700.070; Ord. No. 1209 §1, 5-27-1992)

SECTION 700.080: MINIMUM CONSTRUCTION STANDARDS FOR ADDITIONS OR EXTENSIONS TO THE CITY WATER DISTRIBUTION OR SEWAGE DISPOSAL SYSTEM

The Director of Public Works and Zoning Administrator after consultation with the City's Building Inspector and qualified professional engineers may from time to time propose minimum construction standards relating to all connections to or extensions of the City water distribution system or the City sewage disposal system to the Board of Aldermen of the City of Bolivar. Such standards may include minimum requirements for repairs and provisions relating to water pits and water meters, manholes and all other features that are directly or indirectly related to water distribution or sewage disposal systems. Upon approval of said proposed standards by the Board, no developer, contractor or other third (3rd) party shall thereafter make connections to, extensions of or repairs to the water distribution system or sewage disposal system except in strict compliance with the requirements of said standards. (R.O. 2007 §700.085; Ord. No. 2698, 3-8-2007)

SECTION 225.230: OBSTRUCTING STREET

A. A person commits the offense of obstructing streets, sidewalk, sewer, ditch or drain if he/she acts with criminal negligence in obstructing streets, sidewalk, sewer, ditch or drain.

B. Obstruction, as used in the above Subsection, shall be construed in the broadest sense to include anything which would impede travel upon the streets or sidewalks or change or obstruct the course of flow of any sewer or drain, sewer, ditch, drainage ditch or any other area which commonly drains adjoining areas.

C. This Section shall not apply to police, firemen or other City employee in the discharge of their duties or any other person who is authorized by City Police and gives adequate warning of the obstruction as described in Section 225.220. (R.O. 2007 §225.310; Ord. No. 763 §3(k), 1-17-1980)



**CITY OF
BOLIVAR**

345 S. MAIN AVENUE • BOLIVAR, MISSOURI 65613 • FAX (417) 777-3212

12. This information has already been submitted to EPA.